

Appl. No. 09/367,666
Amdt. dated August 18, 2005
Reply to Office Action of April 19, 2005

PATENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 1. (Currently Amended) A pressure compensating valve including:
2 a chamber for containing fluid defined by a flexible barrier trapped between first
3 and second surfaces;
4 a fluid inlet to provide fluid to the interior of the chamber; and
5 a fluid outlet to selectively allow fluid to pass out of the chamber;
6 wherein, movement of the first and second surfaces relative to each other causes
7 change in contact between the flexible barrier and the first and second surfaces to selectively
8 open the fluid outlet, in a first position, and occlude it between the flexible barrier and one of the
9 surfaces, in a second position-; and wherein the fluid outlet includes an aperture in the flexible
10 barrier which is selectively occluded by one of the surfaces, in the second position.

1 2. (Original) A pressure compensating valve according to claim 1, wherein
2 the fluid inlet passes through the first surface into the chamber.

Claims 3-4 (Cancelled)

1 5. (Previously Amended) A pressure compensating valve according to claim
2 1, further comprising an exhaust aperture in one of the first or second surfaces which is
3 selectively occluded by the flexible barrier in the first and second positions, but open in a third
4 position in which the fluid outlet is occluded.

1 6. (Currently Amended) A pressure compensating valve according to claim
2 1, wherein relative movement of the first and second surfaces parallel to each other causes the
3 flexible barrier to roll along the surfaces to selectively open the fluid outlet.

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1 7. (Previously Amended) A pressure compensating valve according to claim
2 1, wherein a flap-like extension of the flexible barrier selectively opens and occludes the fluid
3 outlet.

1 8. (Previously Amended) A pressure compensating valve according to claim
2 1, further comprising a pressure plate connected to one of the first or second surfaces wherein, in
3 use, the pressure plate experiences a variable working pressure on an enclosed side and a
4 reference pressure on the other side; the pressure differential across the pressure plate causing
5 movement of the first and second surfaces relative to each other to selectively supply fluid to the
6 enclosed side.

1 9. (Currently Amended) A pressure compensating valve according to claim
2 6-8, further comprising a bias spring associated with the pressure plate to bias the first and
3 second surfaces into predetermined positions relative to each other.

1 10. (Currently Amended) A pressure compensating valve according to claim
2 8-9, wherein the chamber is toroidal, the first and second surfaces are concentric cylinders,
3 the fluid inlet is an annular chamber formed on the outer surface of the outer cylinder, and the
4 pressure plate spans the interior of the inner cylinder.

1 11. (New) A pressure compensating valve including:
2 a chamber for containing fluid defined by a flexible barrier trapped between first
3 and second surfaces;
4 a fluid inlet to provide fluid to the interior of the chamber;
5 a fluid outlet to selectively allow fluid to pass out of the chamber; and
6 an exhaust aperture in one of the first or second surfaces which is selectively
7 occluded by the flexible barrier in the first and second positions, but open in a third position in
8 which the fluid outlet is occluded;
9 wherein, movement of the first and second surfaces relative to each other causes
10 change in contact between the flexible barrier and the first and second surfaces to selectively

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11 open the fluid outlet, in a first position, and occlude it between the flexible barrier and one of the
12 surfaces, in a second position.

1 12. (New) A pressure compensating valve according to claim 11, wherein
2 there is a passage between the chamber and the second surface, and the fluid outlet includes an
3 aperture in the second surface which is selectively occluded by the flexible barrier, in the second
4 position.